WO 2005/017584 PCT/US2004/023260

CLAIMS

1. An optical fiber cleaving device comprising a base section, a pair of clamp sections provided on said base section and spaced at a predetermined distance from each other for supporting an unsheathed optical fiber extending therebetween, a blade section provided movably relative to said base section and including an edge capable of being disposed at a fiber cleaving position defined between said clamp sections, and a pusher section provided movably relative to said base section independently of said blade section and including a pushing face capable of being disposed at said fiber cleaving position, characterized in that:

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said optical fiber cleaving device comprises an auxiliary support section provided movably relative to said base section independently of said blade section and said pusher section, and capable of being disposed at an operable position for supporting an unsheathed optical fiber in cooperation with said clamp sections; and that

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said auxiliary support section includes a fiber support face locally located between said clamp sections at said operable position, said fiber support face being so arranged as to come in contact with a local length of an unsheathed optical fiber extending between said clamp sections, the local length being located away from said fiber cleaving position.

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2. An optical fiber cleaving device according to claim 1, wherein said auxiliary support section comprises a thin plate member including said fiber support face, a relief area formed adjacent to said fiber support face so as to be free of contact with a second local length of said unsheathed optical fiber located at said fiber cleaving position, and a holdable area formed adjacent to said fiber support face so as to be supported by said clamp sections together with said unsheathed optical fiber.

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3. An optical fiber cleaving device according to claim 2, further comprising a fiber holder detachably mounted on said base for holding an optical fiber to be cleaved, said thin plate member being attached to said fiber holder.

WO 2005/017584 PCT/US2004/023260

4. An optical fiber cleaving device according to claim 1, further comprising a cover section coupled to said base section in an openable/closable manner, wherein said auxiliary support section comprises a piece member movably attached to said cover section and including said fiber support face in one end face thereof.

- 5. An optical fiber cleaving device according to claim 1, further comprising a cover section coupled to said base section in an openable/closable manner, wherein said auxiliary support section comprises a disc member rotatably attached to said cover section and including said fiber support face in an outer peripheral surface thereof.
- 6. An optical fiber cleaving device according to claim 5, wherein said disk member is provided in said outer peripheral surface with a plurality of fiber support faces having different sizes in a rotation-axis direction and an inoperable face arranged to be deviated toward a rotation center relative to said fiber support faces.
- 7. A method for cleaving optical fibers, characterized in that the method comprises:

providing a pair of clamp sections capable of respectively supporting an unsheathed optical fiber, and spacing said clamp sections at a predetermined distance from each other;

providing an auxiliary support member including a fiber support face capable of supporting an unsheathed optical fiber in cooperation with said clamp sections;

supporting an unsheathed optical fiber on said clamp sections so as to extend between said clamp sections;

securely arranging said auxiliary support member relative to said clamp sections in a manner that said fiber support face come in contact with a first local length of said unsheathed optical fiber extending between said clamp sections;

locally scribing a surface of a target point in a second local length of said unsheathed optical fiber, adjacent to said first local length, between said

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WO 2005/017584 PCT/US2004/023260

clamp sections in a direction generally perpendicular to an axis of said unsheathed optical fiber; and

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applying a pushing force to said second local length of said unsheathed optical fiber in a radial direction between said clamp sections, so as to cleave said unsheathed optical fiber at said target point.